General

Title

Mental illness: risk-adjusted rate of readmission following discharge for a mental illness.

Source(s)

Canadian Institute for Health Information (CIHI). Indicator metadata: 30-day readmission for mental illness. [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015 May [accessed 2015 Jul 13].

Measure Domain

Primary Measure Domain

Related Health Care Delivery Measures: Use of Services

Secondary Measure Domain

Does not apply to this measure

Brief Abstract

Description

This measure is used to assess the risk-adjusted rate of readmission following discharge for a mental illness.

The mental illnesses selected for this indicator are substance-related disorders; schizophrenia, delusional and non-organic psychotic disorders; mood/affective disorders; anxiety disorders; and selected disorders of adult personality and behavior.

Rationale

Readmission to inpatient care may be an indicator of relapse or complications after an inpatient stay. Inpatient care for a person living with a mental illness aims to stabilize acute symptoms. Once stabilized, the individual is discharged, and subsequent care and support are ideally provided through outpatient and community programs in order to prevent relapse or complications. High rates of 30-day readmission could be interpreted as a direct outcome of poor coordination of services and/or an indirect outcome of poor

continuity of services after discharge.

Evidence for Rationale

Canadian Institute for Health Information (CIHI). Hospital mental health services in Canada 2005-2006. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2008.

Canadian Institute for Health Information (CIHI). Indicator metadata: 30-day readmission for mental illness. [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015 May [accessed 2015 Jul 13].

Hermann R, Mattke S. Selecting indicators for the quality of mental health care at the health system level in OECD Countries. Paris (France): Organisation for Economic Co-operation and Development (OECD); 2004.

Leslie DL, Rosenheck RA. Comparing quality of mental health care for public-sector and privately insured populations. Psychiatr Serv. 2000 May;51(5):650-5. PubMed

Lin E, Durbin J, Zaslavska N, et al. Hospital report 2007: mental health. Joint Initiative of the Ontario Hospital Association and the Government of Ontario. Toronto (ON): Health System Performance Research Network (HSPRN); 2008.

Primary Health Components

Mental illness (substance-related disorders, schizophrenia, delusional and non-organic psychotic disorders, mood/affective disorders, anxiety disorders, personality and behaviour disorders); readmission

Denominator Description

Number of episodes of care for selected mental illness discharged between April 1 and March 1 of the fiscal year (see the related "Denominator Inclusions/Exclusions" field)

Numerator Description

Cases within the denominator with a readmission for specific mental illness within 30 days of discharge after the index episode of care (see the related "Numerator Inclusions/Exclusions" field)

Evidence Supporting the Measure

Type of Evidence Supporting the Criterion of Quality for the Measure

A formal consensus procedure, involving experts in relevant clinical, methodological, public health and organizational sciences

One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

Additional Information Supporting Need for the Measure

Unspecified

Extent of Measure Testing

Unspecified

State of Use of the Measure

State of Use

Current routine use

Current Use

not defined yet

Application of the Measure in its Current Use

Measurement Setting

Hospital Inpatient

Professionals Involved in Delivery of Health Services

not defined yet

Least Aggregated Level of Services Delivery Addressed

Regional, County or City

Statement of Acceptable Minimum Sample Size

Unspecified

Target Population Age

Age greater than or equal to 15 years

Target Population Gender

Either male or female

National Strategy for Quality Improvement in Health Care

National Quality Strategy Priority

Institute of Medicine (IOM) National Health Care Quality Report Categories

IOM Care Need

Not within an IOM Care Need

IOM Domain

Not within an IOM Domain

Data Collection for the Measure

Case Finding Period

1 April to 1 March

Denominator Sampling Frame

Patients associated with provider

Denominator (Index) Event or Characteristic

Clinical Condition

Institutionalization

Patient/Individual (Consumer) Characteristic

Denominator Time Window

not defined yet

Denominator Inclusions/Exclusions

Inclusions
Number of episodes of care* for selected mental illness discharged between April 1 and March 1 of the fiscal year

> A selected mental illness is coded as the most responsible diagnosis (MRDx)
> Diagnosis codes for selected mental illness:
>> Substance-related disorders
>> Schizophrenia, delusional and non-organic psychotic disorders
>> Mood/affective disorders
>> Anxiety disorders

Selected disorders of adult personality and behavior

Discharges between April 1 and March 1 of the following year (period of case selection ends on March 1 to allow for 30 days of follow-up)

Age at admission is 15 years or older

Sex recorded as male or female

Admission to a general hospital

Canadian resident

Note: Refer to the original measure documentation for the administrative codes.

*An episode of care refers to all contiguous inpatient hospitalizations in general hospitals (excluding free-standing psychiatric facilities) and all day surgery visits regardless of diagnoses. Refer to the original measure documentation for additional information on constructing an episode of care.

Exclusions

Records with an invalid health card number

Records with an invalid date of birth

Records with an invalid admission date

Records with an invalid discharge date

Discharged as a death

Cadaveric donor or stillbirth records (Admission Category = R or S)

Records that are dead on arrival

Exclusions/Exceptions

not defined yet

Numerator Inclusions/Exclusions

Inclusions

Cases within the denominator with a readmission for specific mental illness within 30 days of discharge after the index episode of care

An episode of care is considered a readmission if the two following conditions are met:

It has occurred within 30 days of discharge of an index episode; and

A diagnosis of mental illness was recorded as the most responsible diagnosis.

Note: A 30-day readmission can occur in the same facility as the index episode or in a different facility. A readmission can be a planned or unplanned admission. Refer to the original measure documentation for additional information.

Exclusions

Unspecified

Numerator Search Strategy

Institutionalization

Data Source

Administrative clinical data

Type of Health State

Proxy for Outcome

Instruments Used and/or Associated with the Measure

Unspecified

Computation of the Measure

Measure Specifies Disaggregation

Does not apply to this measure

Scoring

Rate/Proportion

Interpretation of Score

Does not apply to this measure (i.e., there is no pre-defined preference for the measure score)

Allowance for Patient or Population Factors

not defined yet

Description of Allowance for Patient or Population Factors

- Indicators are reported at the national, provincial/territorial, and regional levels.
- Unless otherwise specified, for indicators based on place of residence, data is reported based on the region of the patient's residence, not region of hospitalization. Consequently, these figures reflect the hospitalization experience of residents of the region wherever they are treated, including out of province, as opposed to the comprehensive activity of the region's hospitals (that will also treat people from outside of the region). Hospitalizations occurring in the U.S. or abroad are not included.
- For indicators based on place of service (where the patient was treated), data is reported based on the administrative region of the facility (e.g., region of hospitalization).
- Rates are standardized or risk-adjusted wherever possible to facilitate comparability across provinces/regions/facilities and over time.

Risk Adjustment

Statistical regression modelling, an indirect method of standardization in risk adjustment, was used to risk-adjust patient characteristics. Risk factors that were controlled for include age, gender and selected pre-admit comorbid diagnoses that were applicable to the indicator. The selected risk factors were identified based on a literature review, clinical evidence and expert group consultations using the principles of appropriateness, viability (i.e., sufficient number of events) and data availability. Risk factors must be listed as significant pre-admit conditions on the patient's abstract for them to be identified for risk adjustment. For indicators relating to readmission after certain medical conditions (e.g., Readmission After Acute Myocardial Infarction [AMI], Overall Readmission), diagnoses were flagged as risk factors if they were recorded as pre-admit conditions on any of the records within patients' episodes of care. For all other indicators, risk factors were flagged if conditions were recorded as pre-admit diagnoses on the record where the outcome/denominator was abstracted.

Risk-adjusted rates are calculated at the hospital, health administration region and provincial/territorial levels. Regional and provincial risk-adjusted rates are aggregated hospital-level data.

Refer to the *General Methodology Notes* document (see the "Companion Documents" field) for additional information on risk adjustment. Information on Canada averages, model specifications (coefficients and p-values) and International Statistical Classification of Diseases and Related Health Problems, Tenth Revision, Canadian Enhancement (ICD-10-CA) codes used to flag risk factors can be found in the *Model Specifications* document (see the "Companion Documents" field).

Standard of Comparison

not defined yet

Identifying Information

Original Title

30-day readmission for mental illness.

Measure Collection Name

Health Indicators ePublication 2015

Submitter

Canadian Institute for Health Information - Nonprofit Organization

Developer

Canadian Institute for Health Information - Nonprofit Organization

Funding Source(s)

Canadian Government

Composition of the Group that Developed the Measure

Employees: Canadian Institute for Health Information (CIHI) Health Indicators

Financial Disclosures/Other Potential Conflicts of Interest

None

Adaptation

This measure was not adapted from another source.

Date of Most Current Version in NQMC

2015 May

Measure Maintenance

Annually

Date of Next Anticipated Revision

Unspecified

Measure Status

This is the current release of the measure.

This measure updates a previous version: Canadian Institute for Health Information (CIHI). Health indicators 2013: definitions, data sources and rationale. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2013 May. 89 p.

The measure developer reaffirmed the currency of this measure in April 2016.

Measure Availability

Source available from the Canadian Institute for Health Information (CIHI) Web site
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For more information, contact CIHI at 4110 Yonge Street, Suite 300, Toronto, Ontario, Canada, M2P 2B7; Phone: 416-481-2002; Fax: 416-481-2950; E-mail: hsp@cihi.ca; Web site: www.cihi.ca
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Companion Documents

The following are available:

Canadian Institute for Health Information (CIHI). Indicator library: model specifications - clinical indicators, May 2015. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015 May. 28 p. This document is available from the Canadian Institute for Health Information (CIHI) Web site
.

Canadian Institute for Health Information (CIHI). Indicator library: general methodology notes - clinical indicators, March 2015. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015 Mar. 19 p. This document is available from the CIHI Web site .

Canadian Institute for Health Information (CIHI). Canadian coding standards for version 2015 ICD-10-CA and CCI. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015. 511 p. This document is available from the CIHI Web site .

Canadian Institute for Health Information (CIHI). Health indicators interactive tool. [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); [accessed 2015 Jan 20]. This tool is available from the CIHI Web site .

NQMC Status

This NQMC summary was completed by ECRI Institute on March 18, 2013. The information was verified by the measure developer on May 17, 2013.

The CIHI informed NQMC that this measure was updated on October 31, 2013 and provided an updated version of the NQMC summary. This NQMC summary was reviewed and updated accordingly by ECRI Institute on February 21, 2014.

This NQMC summary was updated again by ECRI Institute on September 4, 2015. The information was verified by the measure developer on November 6, 2015.

The information was reaffirmed by the measure developer on April 29, 2016.

Copyright Statement

Production

Source(s)

Canadian Institute for Health Information (CIHI). Indicator metadata: 30-day readmission for mental illness. [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2015 May [accessed 2015 Jul 13].

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